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DOCUMENT CLASSIFICATION BARCODE SHEET



# 371 Application As-Filed

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER 98078-88006
INTERNATIONAL APPLICATION NO. PCT/KR00/01028		U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/088289
TITLE OF INVENTION HEALTH CARE SYSTEM AND METHOD THEREOF		PRIORITY DATE CLAIMED 16 September 1999
APPLICANT(S) FOR DO/EO/US SEO, Young, Don		

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

- ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
- ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
- ☒ The US has been elected by the expiration of 19 months from the priority date (Article 31).
- ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - ☐ is attached hereto (required only if not communicated by the International Bureau).
  - ☒ has been communicated by the International Bureau.
  - ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
  - ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
    - ☒ is attached hereto.
    - ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
    - ☐ are attached hereto (required only if not communicated by the International Bureau).
    - ☒ have been communicated by the International Bureau.
    - ☐ have not been made; however, the time limit for making such amendments has NOT expired.
    - ☐ have not been made and will not be made.
- ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).
  - ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
  - ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
- ☒ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

- ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
- ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
- ☐ A FIRST preliminary amendment.
- ☐ A SECOND or SUBSEQUENT preliminary amendment.
- ☐ A substitute specification.
- ☒ A change of power of attorney and/or address letter.
- ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
- ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
- ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
- ☐ Other items or information:

U.S. APPLICATION NO. (USPTO) <b>10/088289</b> INTERNATIONAL APPLICATION NO. <b>PCT/KR00/01028</b>	ATTORNEY'S DOCKET NUMBER <b>98078-88006</b>	CALCULATIONS PTO USE ONLY  
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21. ☒ The following fees are submitted:

BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):	\$1040.00
Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO	
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO	\$890.00
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO	\$740.00
International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4)	\$710.00
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4)	\$100.00

**ENTER APPROPRIATE BASIC FEE AMOUNT =**

Surcharge of \$130.00 for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492(c)). 20 ☐ 30 ☐

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE
Total claims	17 - 20 =	0	x \$18.00
Independent claims	6 - 3 =	3	x \$84.00
<b>TOTAL OF ABOVE CALCULATIONS =</b>			<b>\$ 1292.00</b>

☒ Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.

**SUBTOTAL = \$ 646.00**

Processing fee of \$130.00 for furnishing the English translation later than months from the earliest claimed priority date (37 CFR 1.492(f)). 20 ☐ 30 ☐

**TOTAL NATIONAL FEE = \$ 646.00**

Fees for recording the enclosed assignment (37 CFR 1.21(b)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.1). \$40.00 per property +

**TOTAL FEES ENCLOSED = \$ 646.00**

Amount to be refunded: \$	\$
charged: \$	\$

a. ☒ A check in the amount of \$ 646.00 to cover the above fees is enclosed.

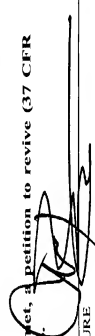
b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
 A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 07-1985. A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

SIGNATURE   
 NAME Ari M. Bai  
 REGISTRATION NUMBER 38,726

10/088289  
PTO/PCT Rec'd 14 MAR 2002

## HEALTH CARE SYSTEM AND METHOD THEREOF

## BACKGROUND OF THE INVENTION

(a) Field of the Invention

The present invention relates to a health management system and a health management method for a user to effectively control his weight via a professional doctor's prescription.

## (b) Description of the Related Art

In response to the lifestyle changes and complications of society, various diseases of adult people have been induced and interest in health issues has increased. In particular, interest in people's weight has become connected to beauty and adult diseases, and various products have been developed to deal with this.

However, most related art health management devices simply compute and inform a user of obesity, a normal weight, an encouraged caloric intake per day for an ideal body weight, or calories consumed in a day, or inform the user of a weight change determined by deducting his caloric consumption from his caloric intake.

Therefore, the related art health management devices have problems in that it is impossible to provide information on the way to reach a desired weight, or consider a personal clinical history or dietary habits.

Further, the related art health management devices have a disadvantage in that it is difficult to effectively control a weight since an encouraged caloric consumption per day with relation to an encouraged caloric

intake per day is not suggested.

Furthermore, the related art healing management devices have the disadvantage in that it is impossible to receive a professional doctor's advice required for weight control as frequently as desired.

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#### SUMMARY OF THE INVENTION

Accordingly, the present invention is directed to an apparatus and method for format converting a video that substantially obviates one or more of the problems due to limitations and disadvantages of the related art.

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In view of the prior art described above, it is an object of the present invention to provide a health management device which includes a data transmission and receiving element, so that a professional doctor analyzes personal data such as personal clinic history and dietary habits, caloric intake and caloric consumption, and body data of a user and suggests a prescription for encouraged caloric intake and consumption per day as well as content of activity for the caloric consumption by means of the data, and the user can input his food intake and activity contents and receive prescriptions of the doctor at any time.

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It is another object of the invention to provide a health management system and a health management method which have medical professionalism, mobility and convenience so that adult diseases due to the lack of nutrients or worse caused by inappropriate dietary habits for weight control, overeating of food and lack of exercise may be prevented and beauty may be promoted by controlling weight and managing health effectively.

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In order to achieve the above objects and other advantages, a health management system and a health management method according to the present invention may provide a professional doctor's prescription for weight management of a user according to the personal data input by the user such as body data, clinical history, dietary habits, caloric intake and activity contents.

According to one aspect of the present invention, a health management device includes an input part, a control part, a memory part and an output part.

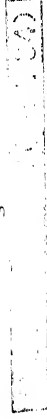
The input part is to input basic data of a user.

The control part computes an ideal body weight, a body mass index and a waist/hip circumference ratio on the basis of the basic data for suggesting a prescription by computing an encouraged caloric intake per day, distribution of respective nutrients and an encouraged calorie consumption per day, and suggests a prescription of an amount of one or more food each other and time of activity on the remaining intake calories and consumption calories by analyzing calories already taken in and consumed by a predetermined time point in a day when a user inputs desired food or activity content.

The memory part stores the input content of the input part and stores software and data required for the processing of the control part.

The output part outputs a result processed by the control part and the basic data.

According to another aspect of the present invention, in a health management device including an input part for inputting basic data, a control part for suggesting a prescription on the basis of the basic data, a memory part for storing the basic data and software and data required for the process to be



performed by the control part, and an output part for outputting a result of the process performed by the control part, a health management method includes the steps of inputting basic data, selecting functions, computing a total caloric consumption in a day, computing a total caloric intake in a day, outputting a current weight status, recognizing a desired weight, and estimating a weight after a predetermined period or a period to reach the desired weight.

The step of inputting basic data is carried out by storing the basic data input in the input part by a user.

The step of selecting functions is carried out by selecting a function to be used by the user from all functions provided and performed by the health management device.

The step of computing total caloric consumption in a day is carried out by performing a function for computing total consumed calories by activity in a day and remaining encouraged caloric consumption on the basis of the basic data.

The step of computing total caloric intake in a day is carried out by computing total calories taken in a day and remaining encouraged caloric intake on the basis of the basic data.

The step of outputting a current weight status is carried out by outputting a current weight status on the basis of the basic data in the function selected by the user.

The step of recognizing a desired weight is carried out for suggesting a prescription for a procedure to reach the desired weight.

The step of estimating a weight change is a step for performing a



function for estimating a controllable weight from the present to a desired period  
 or a period to reach a desired weight according to whether the user selects and  
 inputs the desired period or the desired weight on the basis of the caloric intake  
 per day and the caloric consumption per day from a predetermined time point in  
 the past to the present.

In a health management device including an input part for inputting  
 basic data, a control part for analyzing the basic data and assessing a desired  
 body data on the basis of the basic data, a memory part for storing the basic  
 data and software and data required for the process to be performed by the  
 control part, an output part for outputting a result of the process performed by  
 the control part, a data conversion device and a data transmitting and receiving  
 device, a health management system includes a network and a database server.

The network is to transmit data output from the health management  
 device, and the database server is to store the data transmitted via the network  
 for transmitting a prescription of a doctor on the basis of the transmitted data to  
 the health management device via the network.

Wherein, the database server has functions for analyzing the basic data,  
 assessing a desired body data on the basis of the basic data and transmitting a  
 prescription of a doctor to the health management device.

A health management method according to a first embodiment of the  
 present invention includes the steps of connecting the database server to the  
 health management device via a network, storing analysis data of the basic  
 data and assessment data of the desired body data transmitted from a health  
 management device, and transmitting prescription data of a doctor who inspects

the analysis of the basic data and the assessment of the desired body data of the database server by the network.

According to the first embodiment of the present invention, in a health management device including an input part, a control part, a memory part, an output part, a data conversion device and a data transmitting and receiving device, and having functions to transmit basic data and desired body data of a user and to output a prescription of a doctor who receives the basic data and the desired body data, a health management method includes the steps of connecting the database server to the health management device via a network, storing analysis data of the basic data and assessment data of the desired body data transmitted by the health management device in the database server, and transmitting a prescription of a doctor who inspects the analysis data of the basic data and the assessment data of the desired body data to the health management device via the network.

In a health management device including an input part for inputting basic data, a control part for analyzing the basic data and assessing the desired body data, a memory part for storing the basic data and software and data required for the process to be performed by the control part, and an output part for outputting a result of the process performed by the control part, a data conversion data and a wireless transmitting and receiving device, a health management system according to a second embodiment of the present invention includes a base station, a base station control part, a network switch and a database server.

The base station is wirelessly connected to the health management

device by using multi-connection communications techniques and protocol to wirelessly connect the health management device to a database server.

The base station control part manages communications frequencies between the health management device and the base station for monitoring and controlling the base station.

The database server stores information on the installation, management and repair, and connection attestation in the wireless communications connection with the health management device, and transmits prescription data of a doctor to the health management device according to the basic data of a user by being connected to the health management device via the base station.

The network switch connects the base station control part to the database server.

Wherein the database server may also analyze the basic data of the user and assess the desired body data on the basis of the basic data instead of the health management device.

In a health management device including an input part, a control part, a memory part, an output part, a data conversion device and a data transmitting and receiving device, and having functions to transmit basic data and desired body data of a user and to output a prescription of a doctor who receives the basic data and the desired body data, a health management method according to a second embodiment of the present invention includes the steps of wirelessly connecting a base station to the health management device by using multi-connection communications techniques and protocol, storing analysis and assessment of the basic data and the desired body data in a database server,

and transmitting prescription data of the database server, that is, the inspected analysis and assessment of the basic data and the desired body data, to the health management device via the database server, a network switch, a base station control part and the base station.

Wherein, in the health management device including an input part, a control part, a memory part, an output part, a data conversion device and a data transmitting and receiving device, and having functions to transmit basic data and desired body data of a user and to output a prescription of a doctor who receives the basic data and the desired body data, the health management method according to the second embodiment of the present invention may include the steps of wirelessly connecting a base station to the health management device by using multi-connection communications techniques and protocol, storing the analysis and assessment of the basic data and the desired body data in the database server, storing analysis and assessment results of the basic data and the desired body data performed by the database server in the database server, and transmitting prescription data of a doctor who inspects the analysis and assessment results stored in the database server to the health management device via the database server, a network switch, a base station control part and the base station.

Both the foregoing general description and the following Detailed Description are exemplary and are intended to provide further explanation of the invention as claimed.

**BRIEF DESCRIPTION OF THE DRAWINGS**

The accompanying drawings provide a further understanding of the invention and, together with the detailed description, explain the principles of the invention. In the drawings:

Fig. 1 is a block diagram of a health management device according to the present invention;

Fig. 2 is a flow chart for explaining a health management method according to the present invention;

Fig. 3 is a flow chart for explaining a health management system according to a first embodiment of the present invention;

Fig. 4 is a flow chart for explaining a health management method of the health management system according to the first embodiment of the present invention;

Fig. 5 is a block diagram showing a health management system according to a second embodiment of the present invention; and

Fig. 6 is a flow chart showing a health management method of the health management system according to the second embodiment of the present invention.

**DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS**

The present invention will be described in detail with reference to the accompanying drawings.

Fig. 1 is a block diagram showing a health management device

according to the present invention.

Referring to Fig. 1, a health management system 100 according to the present invention includes an input part 110, a control part 120, a memory part 130 and an output part 140.

The input part 110 is to input personal data of a user, body data, current clinical history and habits, kind and amount of food taken by the user, and activity contents. The personal data of the user means the date of birth and the distinction of sex, and the body data means height, weight, waist size, hip size and activity degree regarded as factors for computing an encouraged caloric intake per day according to the routine activity of the user.

The control part 120 provides a caloric intake per day, distribution of nutrients, and an encouraged caloric intake per day, computes an ideal body weight, a body mass index and a waist/hip circumference ratio on the basis of past and present body data and a desired body data, analyzes a transition of body data of the user, and computes encouraged caloric intake and consumption per day according to the activity of the user.

A prescription for the health of the user on the basis of above includes amount and kind of food, and time and content of activity for controlling excessive or insufficient calorie amounts.

The memory part 130 stores the input content of the input part 110, and software and data required for the process to be performed by the control part 120.

The output part 140 outputs contents input by the user, and a result of the process performed by the control part 120 visually and aurally.

Fig. 2 is a flow chart showing a health management method according to the present invention.

As shown in Fig. 2, a health management method according to the present invention includes the steps of inputting basic data \$100, selecting functions \$200, computing total calories taken in a day \$300, computing total calories consumed in a day \$400, recognizing a current weight \$500, recommending a desired weight \$600, and simulating a future weight \$700.

In step S100, a user inputs personal data such as the date of birth and the distinction of sex, kind and amount of food taken by the user, activity contents per day, body data and current clinical history, pregnancy and nursing status, and dietary habits in the input part 110 and the above data is stored in a memory part 130.

At this time, the body data indicates past and present body data such as height, weight, waist size, hip size and activity degree together with respective data measuring dates.

An amount of activity per day means content and hours of activities taken in a day by the user. In the present invention, the activity content is organized by eating, reading newspapers, talking, driving a car, watching TV, office work and sleeping, wherein other various activities may be added.

In step S200, the user selects a function to use out of various functions provided by the health management device 100.

In step S300, total caloric intake of the user is computed on the basis of the basic data input in step S100, wherein total calories and nutrients taken in a day are analyzed in step S305, and the total calories and nutrients taken in a

day and a remaining encouraged caloric intake and nutrients for the day are output in step S310.

If a signal for selecting a function for computing the total caloric intake per day is received by the control part 120 by the selection of the user in step S200, the control part 120 computes the total calories and nutrients taken in a day on the basis of the calories and nutrients taken for a day input in step S100.

In step S400, total calories consumed by activities of the user in a day are computed on the basis of the basic data input in step S100, wherein the total calories consumed a day are analyzed in step S405 and the total calories consumed in a day and an encouraged caloric consumption of the day, and a predictive total caloric consumption in a day are output in step S410.

in step S405, the control part 120 receives a signal selecting a function for computing total caloric consumption in a day by the selection of the user in step S200, and the control part 120 computes the total calories consumed by the user in a day on the basis of the amount of activity undertaken by the user in the day which was input in the basic data input step S100.

That is, as the user inputs time of each activity in the activity contents, the control part 120 computes the caloric consumption according to each of the activities and hours of the activities in view of the current weight by using a computation formula stored in the memory part 130.

In step 410, the control part 120 outputs the total caloric consumption and a predictive total caloric consumption in a day computed in step S405 by the output part 140 and the encouraged caloric consumption of the user on the basis of the basic data input in the basic data which was input in step S100 by



the output part 140.

In step S500, a current weight status on the basis of the basic data is output, wherein the basic data is analyzed in step S505 and a prescription for the current weight is output in step S510.

In step S505, the basic data input in the basic data input step S100 is analyzed with relation to a desired weight or a desired period according to whether the user inputs the desired weight or a desired period in the selecting step. On the other hand, the basic data input in the basic data input step S100 is analyzed with relation to the current weight when the user does not input either the desired weight or the desired period. The control part 120 compares and analyzes the desired weight with the current weight, or the current weight with an ideal weight, for assessing how much the desired weight or the ideal weight is achieved.

In step S510 for outputting a prescription for the current weight, the control part 120 determines a lower weight, a normal weight, an overweight and obesity by comparing the desired weight with the current weight, or the current weight with the ideal weight, suggests the degree of the waist/hip circumference and suggests a prescription per day according to the determination, wherein the control part 120 suggests an appropriate way to achieve weight control according to the determination contents.

Step S600 for recognizing a desired body weight is carried out for suggesting a prescription of the weight control for the user to reach his desired body weight for a desired period and includes the steps of setting a desired body weight S605, assessing desired body data S610 and suggesting a

prescription with relation to the assessment S615.

In step S605, body data desired by the user is stored in the memory part 130 via the input part 110.

In step S610, the desired body data input in step S605 is compared with the current basic body data input in step S100 for assessing a current status.

In step S615, the control part 120 analyzes various factors such as current weight, obesity, waist/hip circumference, personal clinical history, habits, etc. and suggests the way for controlling his weight, that is, appropriate speed of the weight control, caloric intake per day, increase or decrease of calories, caloric consumption per day, encouragement or limitation of intake food, encouraged activity names, etc. by the output part 140.

In the future weight simulation step S700, a weight of the user or a controllable weight of the user after a predetermined period from the present, or a period to reach the desired body weight from the current weight is estimated on the basis of the caloric intake and consumption per day, or the weight change from a predetermined time point in the past to the present. The future weight simulation step S700 includes the steps of selecting either designation of a desired value (a desired period or a desired weight) or not in step S710, selecting either an estimated period or an estimated weight in step S715, inputting an estimated period in step S720, inputting an estimated weight in step S725, performing a first simulation in step S730, performing a second simulation in step S735, selecting either a desired period or a desired weight in step S740, inputting a desired period in step S745, inputting a desired weight in step S750, performing a third simulation in step S755, and performing a fourth









The base station 510 is wirelessly connected to the health management device 100" using multi-connection communications techniques such as CDMA and TDMA, or protocol to wirelessly connect the health management device to the database server.

The base station control part 530 manages communications frequencies between the health management device 100" and the base station 510 for monitoring and controlling the base station.

The database server 570 stores information on the installation, management and repair, connection attestation, fee calculation and other problems in the wireless communications connection with the health management device 100", and transmits prescription data of a doctor to the health management device 100" on the basis of the basic data of a user by being connected to the health management device 100" via the base station 510. Further, if any new items are generated, the database server 570 transmits the new items via the base station 510 for updating the memory content of the health management device 100"

The network switch 550 connects the base station control part 530 to the database server 570.

Fig. 6 is a flow chart for explaining a health management method of the health management system according to the second embodiment of the present invention.

As shown in Fig 6, the health management method of the health management system according to the second embodiment of the present invention includes the steps of connecting a base station to the health









waist size, hip size and a routine activity degree as factors for computing encouraged calories per day.

5. In a health management device including an input part for inputting basic data, a control part for suggesting a prescription on the basis of the basic data, a memory part for storing the basic data and software and data required for the process to be performed by the control part, and an output part for outputting a result of the process performed by the control part, a health management method comprising the steps of:

storing the basic data input in the input part by a user;

user; providing functions of the health management device selected by the

computing total calories taken in a day;

performing a function for computing total calories consumed by activities in a day on the basis of the basic data;

performing a function for outputting a current weight status on the basis of the basic data;

performing a function for assessing a current weight level with relation to a desired weight or an ideal body weight respectively set by the user and assessing how much the current weight reaches the desired weight or the ideal body weight;

estimating a weight of the user after a predetermined time period on the basis of the caloric intake per day and the caloric consumption per day from a predetermined time point in the past to the present; and

estimating a controllable weight from the present to a desired period or a

period to reach a desired weight according to whether the user selects and inputs a desired period or a desired weight.

6. The health management method of claim 5, wherein the step for analyzing total calories consumed in a day comprises the sub-steps of:

computing total calories consumed in a day on the basis of input activity contents, activity hours, and the current weight by the control part; and outputting the computed total calories consumed in a day, remaining encouraged caloric consumption per day and a predictive total caloric consumption in a day by the control part.

7. The health management method of claim 5, wherein the step of outputting a current weight status on the basis of the basic data comprises the sub-steps of:

computing a body mass index and a waist/hip circumference ratio of the user by analyzing the basic data for outputting whether the current weight of the user is normal or not;

assessing a lower weight, a normal weight, an overweight and obesity with the current body data, the body mass index, and the waist/hip circumference ratio; and

8. The health management method of claim 5, wherein the step of suggesting a prescription for the desired assessment comprises the sub-steps of:





according to the content of transmission of a database server, to transmit the analysis data, assessment data and the prescription performed by the health management device to the database server according to the requirement of the user, and to output a prescription of a doctor transmitted via the database server, a health management method comprising the steps of:

connecting the database server to the health management device via a network;

storing the analysis data of the basic data, the assessment data of the desired body data, and the prescription data of the health management device transmitted from the health management device; and

transmitting a prescription of a doctor who inspects the analysis data of the basic data, the assessment data of the desired body data, and the prescription data of the health management device by the database server to the health management device, when suggesting the prescription or updating the memory content of the health management device.

13. In the health management device including an input part, a control part, a memory part, an output part, a data conversion device and a data transmitting and receiving device for transmitting basic data and desired body data of a user and outputting a prescription of a doctor who reviews the data, a health management method of claim 12, comprising the steps of:

connecting the database server to the health management device via a network;

storing analysis data of the basic data and the desired body data transmitted from the health management device; and



storing analysis and assessment of the basic data and the desired body data in the database server for transmitting prescription data of a doctor who inspects the stored data to the health management device, when suggesting the prescription or updating the memory content of the health management device

14. In a health management device including an input part for inputting basic data, a control part for analyzing the basic data and assessing the desired body data, a memory part for storing the basic data and software and data required for the process to be performed by the control part, an output part for outputting a result of the process performed by the control part, and a data conversion device and a wireless transmitting and receiving device, a health management system comprising:

a base station for connecting to the health management device by using multi-connection communications techniques and protocol to wirelessly connect the health management device to a database server;

a base station control part for managing communications frequencies between the health management device and the base station for monitoring and controlling the base station;

the database server for storing information on the installation, management, repair, and connection attestation in the wireless communications connection with the health management device, and transmitting prescription data of a doctor according to the user's basic data to the health management device by being connected to the health management device via the base station; and

a network switch for connecting the base station control part to the



database server.

15. A health management system of claim 14, further comprising the functions of analyzing and assessing the basic data and the desired body data on the basis of the basic data of the user and storing the result of the analysis and the assessment, wherein the prescription of a doctor is transmitted to the health management device.

16. In a health management device including an input part, a control part, a memory part, an output part, a data conversion device and a data transmitting and receiving device, and having functions to analyze basic data and assess desired body data on the basis of the basic data and desired body data of a user for directly suggesting a prescription, to update the memory content according to the content of transmission of a database server, to transmit the analysis data, assessment data and the prescription performed by the health management device to the database server according to the requirements of the user, and to output a prescription of a doctor transmitted via the database server, a health management method comprising the steps of:

connecting the database server to the health management device via a network;

storing analysis data of the basic data, assessment data of the desired body data, and prescription data of the health management device transmitted from the health management device; and

inspecting the analysis data of the basic data, the assessment data of the desired body data, and the prescription data of the health management device in the database server for transmitting prescription data of a doctor or





prescription or updating the memory content of the health management device.

### ABSTRACT OF THE DISCLOSURE

A health management system includes a health management device having an input part for inputting basic data, a control part for analyzing the basic data and assessing desired body data on the basis of the basic data, a memory part for storing the basic data, and software and data required for the process to be performed by the control part, an output part for outputting a result of the process performed by the control part, a data conversion device, a data transmitting and receiving device, a network for transmitting data output from the health management device and a database server for storing, analyzing and assessing the data transmitted via the network from the health management device. Further, the database server transmits a prescription of a professional doctor who inspects the data analysis and assessment to the health management device via the network. If a user inputs his body data and food intake or activity contents in the health management device, the health management device analyzes and assesses the input items and provides prescriptions for the current body data, desired body data and health management data directly to the user or via the database server together with the prescription of the doctor, thereby achieving effective weight control and health management.

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FIG. 1

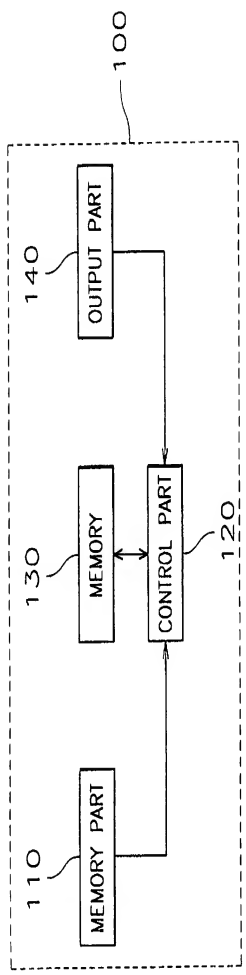


FIG. 3

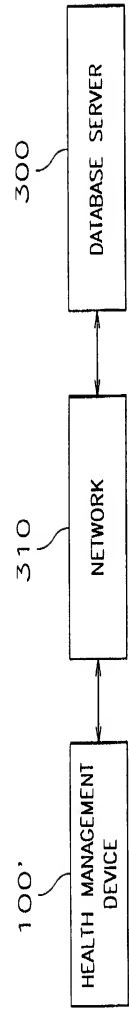
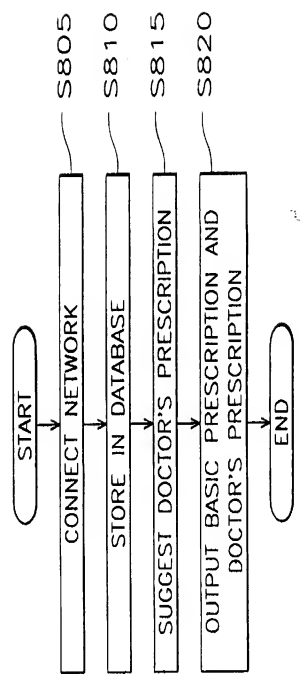


FIG. 4





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FIG. 5

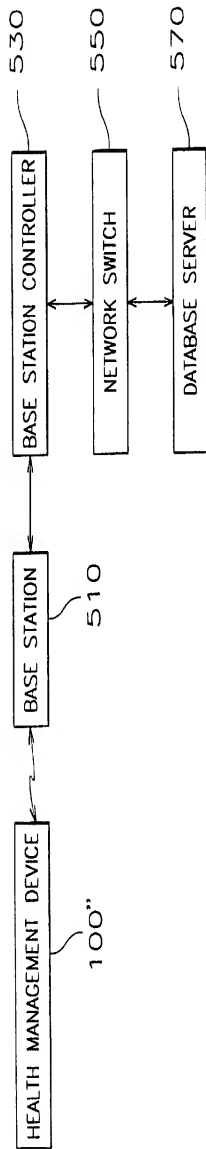
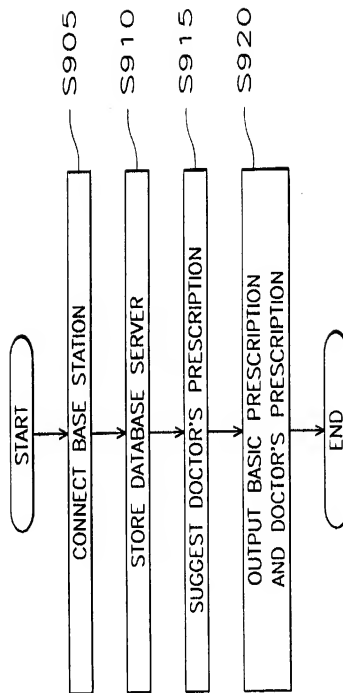


FIG. 6



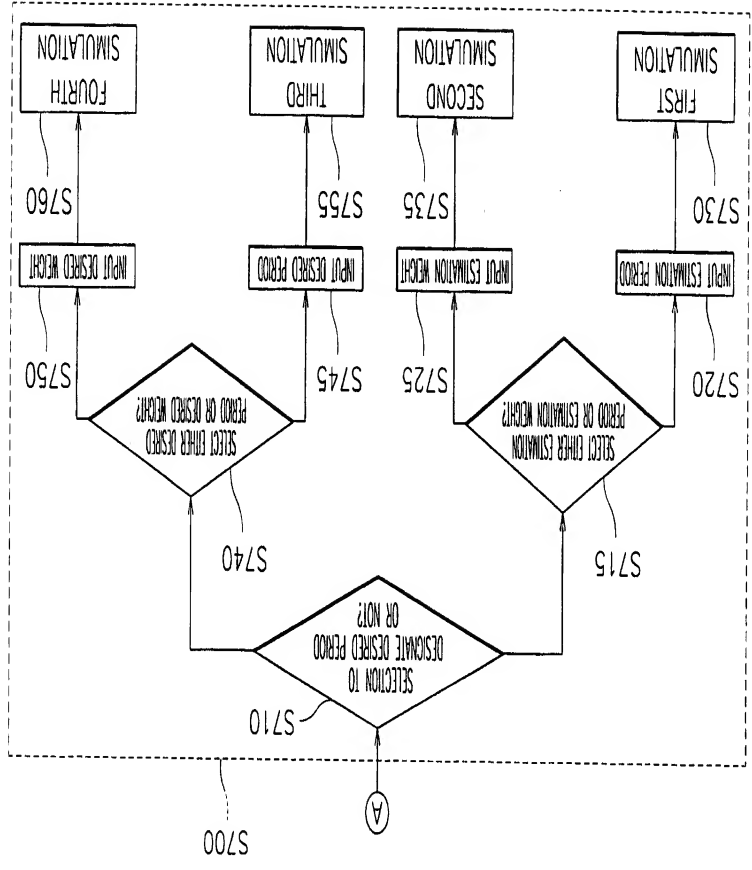


FIG. 2B



# Declaration and Power of Attorney for Patent Application

## 특허 출원 관련 선언 및 위임권

### Korean Language Declaration

아래 지명된 발명자로서, 본인은 하기 사항을 선언합니다.

본인의 거주지, 주소 주소 및 국적은 본문의 설명 아래에 기재된 것과 동일합니다.

본인은 하기 명시된 발명에 대한 특허를 청구하는 주체의 최초 원예 민족 발명자이거나, 공동 발명자로서 발명에 실질적으로 공헌한 원예 공동 발명자임을 (아래에 여러 이름이 기재된 경우) 확인합니다.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or one of the original and sole inventors (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

HEALTH CARE SYSTEM AND METHOD  
THEREOF

다음 나의 체크하여 있지 않으면 본 발명의 명세서가 여기에 첨부됩니다.

☐ 미합중국 출원번호 또는 PCT 국제 출원번호는 \_\_\_\_\_로 \_\_\_\_\_에 출원되었고 \_\_\_\_\_에 게재되었음 (여담 경우).

the specification of which is attached hereto unless the following box is checked:

☐ was filed on 12/01/98 as a United States Application Number 09/01008 or PCT International Application Number 14/09/00 and was amended on \_\_\_\_\_ (if applicable).

본인은 상기 제3장에 의거 수정된 상기 명세서는 물론 특허 청구의 내용을 심사함으로써 이해했음을 확인합니다.

I hereby state that I have reviewed and understand the contents and I hereby declare that I understand the claims, as amended by any amendment referred to above.

본인은 연방 규정 코드인 제37 장의 제1.56항에 의거하여 특허 자각에 관한 자포 정보를 공개할 의무를 인정합니다.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

## Korean Language Declaration

[illegible]

I hereby claim foreign priority under Title 35, United States Code, § 119(a)-(g) or § 365(a)(2) for my foreign application(s) for patent or invention(s) filed at (to be filled in by PCT international applicant) \_\_\_\_\_, which was/were filed on \_\_\_\_\_, and I claim the benefit of the filing date of said foreign application(s), since such application(s) were filed before the filing date of this application, which has been made available to the public in the United States listed below and have also identified below, by checking the box, any foreign application for patent or invention certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

우선권 주장 없음

99-39735  
(Number)  
( 418 )

(Country)
Korea

16/09/1999  
(Day/Month/Year Filed)  
(출판일자 역/월/년)

(Number)  
( Vol & )

(Country)  
(271)

(Day/Month/Year Filed) (호/일/년)

부임은 미합중국 수도인 워싱턴에서 1945년 8월 15일 일어난 일입니다.

(Application No.)  
(종인 번호)

Filing Date)  
후원의자}

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Application (출원 번호)

**Filing Date**  
2007. 12. 11

1

[illegible]

I do not claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed in this application or any of the applications listed in this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, acknowledging that the information disclosed in the prior United States or PCT application as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application

Application No.)  
201 240

Filing Date)  
후원이지)

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Application No.)

**Filing Date**  
2010.01.21

1

[illegible]

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code. I understand that willful false statements may be made to falsify the validity of the application of any patent issued thereon.

(Status) (patented, pending, abandoned)  
(현황) (특허 획득, 출원중, 포기)

(Status) (patented, pending, abandoned)

### Korean Language Declaration

저명권: 저명권 발명자로서 본인은 이 특허를 출원하고 이와 관련하여  
특허 및 관공실이 요구하는 서류를 처리하기 위하여 하기 연도(들)  
및/또는 예이언(들)을 증명합니다. (발명 및 등록권로 기명)

POWER OF ATTORNEY: As a named inventor, I hereby  
appoint the following attorney(s) and/or agent(s) to prosecute  
this application and transact all business in the Patent and  
Trademark Office, as indicated herewith. (for name and  
registration number)

서신 수신처 \_\_\_\_\_ Send Correspondence to: \_\_\_\_\_  
직통 전화 수신처: (발명 및 권화번호) \_\_\_\_\_ Direct Telephone Calls to: (name and telephone number) \_\_\_\_\_

단독 또는 첫번째 발명자의 성명	1-DB	Full name of sole or first inventor	SEO, Young=Don
발명자의 서명	영자	Inventor's signature	ES Date 25/02/2002
거주지		Residence	Kyungki-do, Korea K.R.X
국적		Citizenship	Republic of Korea
주소		Post Office Address	Woosung Apt., 102-1502,
			Kyungki-do, Republic of Korea
연락 가능한 두번째 공동 발명자의 이름		Full name of second joint inventor, if any	
두번째 발명자의 서명	영자	Second inventor's signature	Date
거주지		Residence	
국적		Citizenship	
주소		Post Office Address	

(세번째 그림과 차후의 공동 발명자들에 대한 유사한 정보의  
그들의 서명을 제공하십시오.)  
(Supply information and signature for third and subsequent joint  
inventors.)